## Application No. 09/886,625

- 1. CANCELLED
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- 5. (Amended) A positive coefficient device adapted for use in circuit protection, the device comprising:
  - a first laminar foil;
  - a second laminar foil; and

a polymeric compound between the first laminar foil and the second laminar foil, the polymeric compound comprising a polymer, a plasticizer between 5%-15% by volume of the polymeric compound, and carbon black;

with the positive coefficient device having low room temperature resitivities and a switching temperature approximate 70 degrees Celsius.

- 6. The positive coefficient device of claim 5 wherein the polymer comprises a semi-crystalline polymer.
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  - 8. CANCELLED
- 9. (Amended) A method of forming a low switching temperature polymeric positive temperature coefficient device suitable for circuit protection use, the method comprising:

compounding semi-crystalline polymer, plasticizer, and carbon black, to form a polymeric compound, the plasticizer comprising approximately 10% by volume of the polymeric compound;

pressing the polymeric compound between nodular foil; and crosslinking the polymeric compound.

- 10. (New) A positive coefficient device adapted for use in circuit protection, the device comprising:
  - a first laminar foil;
  - a second laminar foil; and
- a polymeric compound between the first laminar foil and the second laminar foil, the polymeric compound comprising a polymer, a plasticizer comprising between 5%-15% by volume of the polymeric compound, and two different carbon blacks.
- 11. (New) The positive coefficient device of claim 10 wherein the plasticizer is a micronized polyester wax.
- 12. (New) The positive coefficient device of claim 11 wherein the polymer is a semi-crystalline polymer.
- 13. (New) The positive coefficient device of claim 12 wherein the polymer comprises between 30%-40% by volume of the polymeric compound.
- 14. (New) The positive coefficient device of claim 13 wherein substantially most of the carbon black is of one type.
- 15. (New) The positive coefficient device of claim 14 wherein the carbon blacks comprise greater than 5% by volume of the polymeric compound.
- 16. (New) The positive coefficient device of claim 14 wherein the carbon blacks comprise 30% by volume of the polymeric compound.
- 17. (New) The positive coefficient device of claim 14 wherein the carbon blacks comprise approximately 50% by volume of the polymeric compound.

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- 18. (New) The positive coefficient device of claim 17 wherein the positive coefficient device has a switching temperature of approximately 70 degrees Celsius.
- 19. (New) The positive coefficient device of claim 18 wherein the plasticizer comprises approximately 10% by volume of the polymeric compound.
- 20. (New) The positive coefficient device of claim 11 wherein the polymer is a semi-crystalline polymer.
- 21. (New) The positive coefficient device of claim 20 wherein the polymer comprises between 30%-40% by volume of the polymeric compound.
- 22. (New) The positive coefficient device of claim 21 wherein substantially most of the carbon black is of one type.
- 23. (New) The positive coefficient device of claim 22 wherein the carbon blacks comprise greater than 5% by volume of the polymeric compound.
- 24. (New) The positive coefficient device of claim 22 wherein the carbon blacks comprise 30% by volume of the polymeric compound.
- 25. (New) The positive coefficient device of claim 22 wherein the carbon blacks comprise approximately 50% by volume of the polymeric compound.
- 26. (New) The positive coefficient device of claim 25 wherein the positive coefficient device has a switching temperature of approximately 70 degrees Celsius.

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- 27. (New) The positive coefficient device of claim 26 wherein the plasticizer comprises approximately 10% by volume of the polymeric compound.
- 28. (New) The positive coefficient device of claim 27 wherein the plasticizer comprises a micronized polyester wax.
- 29. (New) The positive coefficient device of claim 5 wherein the plasticizer comprises approximately 10% by volume of the polymeric compound.
- 30. (New) The positive coefficient device of claim 29 wherein the carbon black comprises a first carbon block and a second carbon black, the first carbon black being different than the second carbon black.
- 31. (New) The positive coefficient device of claim 30 wherein substantially most of the carbon black is the first carbon black.
- 32. (New) The positive coefficient device of claim 31 wherein the carbon black comprises approximately 50% by volume of the polymeric compound.
- 33. (New) The method of forming the low switching temperature polymeric positive coefficient device of claim 9 wherein the carbon black comprises two different carbon blacks.
- 34. (New) The method of forming the low switching temperature polymeric positive coefficient device of claim 33 wherein the two different carbon blacks comprise a first carbon black and a second carbon black, and the carbon black is substantially the first carbon black.